

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-13. (Canceled)

14. (currently amended) ~~[[an]]~~ An optical device for an optical pickup apparatus for recording or reproducing information with respect to ~~an~~ first and second information recording ~~medium~~ media, comprising:

a substrate;

a hologram element to diffract ~~incident beams of first and second wavelengths that are different from each other;~~ a first main beam of first wavelength that is reflected by the first information recording medium and first and second sub-beams of the first wavelength that are reflected by the first information recording medium during recording or reproducing information to or from the first information recording medium and a second main beam of second wavelength that is reflected by the second information recording medium and third and fourth sub-beams of the second wavelength that are reflected by the second information recording medium during recording or reproducing information to or from the second information recording medium to different positions

~~a light receiving element arranged on the substrate and having a plurality of first light receiving regions arranged on the substrate to receive an incident first and second diffracted beams of the first wavelength that are diffracted from the first and second sub-beams by the hologram element and a plurality of second light receiving regions arranged on the substrate to receive an incident third and fourth diffracted beams that are of the second wavelength diffracted from the third and fourth sub-beams by the hologram element; and~~

an operation unit, wherein [[if]] the wavelength of an incident beam to the hologram element is one wavelength of either the first or second wavelengths, carries out a subtraction operation between the signal of the plurality of first light receiving regions that receives the first and second diffracted beams and unnecessary light reflected by recording layers other than a recording layer that is a recording or reproducing object and the signal of the plurality of second light receiving regions that receives-receive the unnecessary light scattering over the substrate including the plurality of first and second light receiving regions reflected by the recording layers other than the recording layer that is the recording or reproducing object, removes a signal component representative of the unnecessary light from the signal from the plurality of first light receiving regions and outputs the detection signal representative of the first light wavelength, [[if]] when the one wavelength is the first wavelength, and carries out a subtraction operation between the signal of the plurality of second light receiving regions that receive the third and fourth diffracted beams and unnecessary light reflected by recording layers other than a recording layer that is a recording or reproducing object and the signal of the plurality of first light receiving regions that receives-receive unnecessary light scattering over the substrate including the plurality of first and second light receiving regions reflected by the recording layers other than the recording layer that is the recording or reproducing object, removes a signal component representative of the unnecessary light from the signal from the plurality of second light receiving regions and outputs the detection signal representative of the second light wavelength, [[if]] when the one wavelength is the second wavelength.

15. (previously presented) The optical device as set forth in claim 14, wherein the first light receiving region and second light receiving region have a nearly equal light receiving area.

16. (Canceled).

17. (previously presented) The optical device as set forth in claim 14, comprising:
determination means for determining whether the wavelength of the incident beam is the first wavelength or the second wavelength, wherein the operation unit outputs the detection signal representative of the wavelength determined by the determination means.

18. (cancelled)

19. (cancelled)

20. (previously presented) The optical device as set forth in claim 14, wherein the hologram element is divided into first and second regions having different diffraction axes; and
each of the first and second light receiving regions has a light receiving region to receive a diffracted beam from the first region of the hologram element and a light receiving region to receive a diffracted beam from the second region of the hologram element.

21. (previously presented) The optical device as set forth in claim 14, wherein the first wavelength is in a 650-nm band and the second wavelength is in a 780-nm band.

22. (previously presented) The optical device as set forth in claim 14, wherein at least one of a first light source for emitting light of the first wavelength and a second light source for emitting light of the second wavelength is arranged on the substrate.

23. (previously presented) The optical device as set forth in claim 21[[;]], comprising:
a first light source for emitting light of the first wavelength; and
a second light source for emitting light of the second wavelength.

24. (previously presented) The optical pickup apparatus as set forth in claim 23, comprising:
a first diffraction grating to divide light of the first wavelength from the first light source into a main beam and two sub-beams; and
a second diffraction grating arranged in the optical device, to divide light of the second wavelength from the second light source into a main beam and two sub-beams.

25. (previously presented) The optical pickup apparatus of claim 23, comprising:
a first diffraction grating arranged in the optical device, to divide light of the first wavelength from the first light source into a main beam and two sub-beams; and
a second diffraction grating to divide light of the second wavelength from the second light source into a main beam and two sub-beams.